

# Aviation News

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Shore cause orders, however, produce mild reaction from lines cited as Board shows it catches field.....Page 30



**Airline Smile Girls:** Finalists in the "Smile Girl" contest conducted by the International Optimists among airline hostesses are shown above. Colonial Airlines' Jeanne Marie Baumer (top row center) is the winner. Other finalists are: bottom row (left to right) Margaret Jo Humber, Capital Airlines-PCA; Mary Lee Colonel, Colonial; Verla Marks, TWA; middle row: Marijo Brigham and Marinel Skelton, both Chicago & Southern, and top row: Dorothy Fincher, Delta Airlines; Miss Baumer; and Doris Fincher, Delta Airlines.



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## THE AVIATION NEWS

# Washington Observer



**MERGE UP TO WASHINGTON**—Industry executives say the proposed Consolidated-Vulcan-Lockhead merger now being on Washington agencies. Expected shortly are formal or informal requests from Justice Dept. and the Commissioner of Internal Revenue on anti-trust and stock transfer gains issues raised by the consolidation plan. Should approvals be favorable, merger machinery will go into high gear. All stages of merger death intended for existing stockholders will be submitted to Securities & Exchange Commission. If SEC raises no objections to the proposal in outline, the companies will take a vote of stockholders, hoping for the required two-thirds approval. Justice Dept. officials say they will have their opinion ready before Thanksgiving but are emphatic in pointing out that even a favorable reply will not guarantee freedom of the new company from anti-trust action.

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**AAF WILL COME PURCHASING CZAR**—Army Air Force spokesmen had appointment of Richard R. Dwyer, executive chairman of the Army-Navy Materials Board and president of Potomac & Gamble, to an important step toward unification of the services. They point out, however, that the decision will not affect aircraft procurement for some time. Initial efforts toward coordinated buying will be directed toward basic items common to both Army and Navy, such as food, fuel, and construction materials.

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**NACA BUDGET BOOST**—Interior Army and Navy present for more separate research is reduced in the request of National Advisory Committee for Aeronautics for a 25% boost in its budget for the next fiscal year. NACA told Budget Bureau it will need \$35,250,000 to expand an expensive research program to meet the services' demands. Appropriation for the current year is \$29,000,000. The Bureau's attitude toward the increase has not been made known, however.

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**ORDNANCE CONTRACTORS SQUAWK**—The Army Ordnance Association has issued a volley at the War Dept. discussing giving AAF control of all guided missile research and development. Assistant Secretary of War for Air Armaments has sent a letter to the main ordnance contractors in an effort to soothe them. He emphasizes that the AAF will function primarily as monitor and coordinator of the missiles program. Furthermore, he promises Ordnance, Signal Corps, and Chemical Warfare Service that they will

be called upon to increase their specialized research and development on propellers, launching devices and radio equipment for guided missiles.

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**AIRLINES ON THE SPOT?**—Aviation and traffic control people are wailing over Administrator T. P. Wright's criticism in his speech before the Institute of Aeronautical Sciences (the CAA's Instrument Landing System will land 30 planes an hour in the near future. Even the most optimistic ILS adherent have never estimated more than one plane every five minutes, while most are sitting at a place every five minutes. Furthermore, ILS is useless in congested air, so no airline has yet asked for CAA permission to use it on regular passenger flights. CAA inspectors, who must post in each airport, are eagerly awaiting that because they feel the system must be introduced soon. When that time comes, CAA probably will lower existing altitude minimum requirements, although nothing lower than 200 ft. can be expected for some time. In practice, most airlines set their own minimum ceilings which are often higher than CAA's. Air transport leaders feel Mr. Wright put them on the spot in virtually promising to the public performance which is not yet in the cards.

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**LAGGING AIRCRAFT STOCKS**—Loren Statistical Bulletin of the Securities & Exchange Commission demonstrates the upward swing of airline securities. While aircraft manufacturing companies stocks averaged 7.6% below 1939 pre-war selling prices, as of mid-September, airline common were up 27.8%. This increase was the greatest among 27 business categories covered in the September report. There were only two other industries reporting common stock prices below pre-war levels—aluminum products and steel & metal casting.

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**WAA STOPS SOLICITING AGENTS**—War Assets Administration's campaign to sign new agents for disposal of surplus aircraft components and parts has slowed to a walk. At present, WAA has 79 agents, and at one time was seeking for 150. Now, while no agency requests are being refused outright, WAA is no longer soliciting prospective agents. It is concentrating on putting material in the hands of existing dealers. As of Oct. 15, 978,000/000 worth of material had been assigned to agents. Sales were \$15,000,000 in original cost. Most difficulty still is in locating the readily-salable items.



# WASP MAJORS

## *for the Rainbow*



Fastest of the luxurious new transports now building for airlines of the world, the Republic Rainbow will cruise at 400 miles an hour on transcontinental and trans-oceanic schedules.

Power for this outstanding performance is supplied by four dependable Pratt & Whitney Wasp Major engines delivering a total of fourteen thousand horsepower.

## PRATT &amp; WHITNEY AIRCRAFT

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ONE OF THE FOUR SECTIONS OF UNITED AIRCRAFT CORPORATION

## Services Order Fifty New Types From 22 Aircraft Manufacturers

AAF will let more contracts before December budget hearings; jets dominate AAF fighters and bombers; Navy sticking to reciprocating engines.

While several of the largest aircraft manufacturing companies are reporting backlogs dominated by commercial orders, the fact that the industry is still deeply engaged in military and naval work is shown by the latest procurements schedules of AAF and Navy's Bureau of Aeronautics which list more than 50 types on order from 24 manufacturers.

The schedule for the Army, as expected, will be greatly enlarged before the end of the year. AAF's fiscal 1945 budget estimates are now in the War Department's upper echelons and are slated to go to the Budget Bureau sometime in December. In order to avoid any criticism at that time by Budget that AAF had not yet obligated most of its 1945 fiscal appropriation, additional contracts probably will be let before December.

[illegible]

AAF has on order only one type of retrofitting engine lighter and very few retrofitting engine bombers. Only one AAF transport is planned for jet and that is an experimental conversion of a Curtiss-Wright C-48, newly-designed MC-118 and using propeller engines. (Aircraft News, Oct. 14,

The Navy's list includes only two jet fighter types and one conventional jet-repowering bomber, although other Navy jet types are in the works.

The AAF procurement list is: **Lackland**—P-30 Shooting Stars in three models, and the FP-30 photoplane, P-30, combustion jet and rocket fighter with a sea level speed of about 530 mph, plus a 66-mph. rocket boost.

**► Consolidated Value**—P-31 prop-jet with a speed of about 500 mph and 3,000-mi. plus range; P-32 rocket-powered with a speed of better than 700 mph for a duration of approximately five min.; B-33 six-engine; B-46 medium jet bomber; B-53, possibly a jet version of the B-38; C-59, transport version of the B-35; L-33, a new transport powered by a Franklin six-cylinder engine.

**North American Avian—P-63** twin Mustang, P-68 jet fighter with speed of about 530 mph; B-45, multiple jet medium bomber.

► **Republic Aviation**—P-64 and FP-64, P-81, rocket-powered with speed of about 750 mph. and climb of 15,000 ft. P-12 Mustang

► **McDonnell Aircraft** — P-61 jet fighter with speed of 680 mph. and 2,000 mi. range; P-65 jet-propelled variant; fighter carried in B-36

Northrop Aircraft—F-15, photon version of F-81, F-89, jet fighter with speed of about 550 mph; B-35 flying wing bomber, B-48, jet version of B-33.

**†Curtiss-Wright**—P-47, jet-propelled all-weather fighter with top speed slightly over 600 mph, but climb of 8,500 fpm.; NC-113, propeller version of C-46.

**B Boeing Aircraft**—E-13, new business, B-47, jet bomber, B-50 new version of B-29, C-60 transport version of B-29.

► **Martin**—B-51, presumably a jet bomber, B-49, four-jet bomber

► **Douglas Aircraft**—C-74 Globemaster transport, KC-112 refueling

✦ Fairchild E & A—C-82 Packet  
Helicopters are on order from

Bel Aircraft, G & A Aircraft, Kellett and Sikorsky. Only glider contract is with Chiss Aircraft.

In addition, AAF has on its procurement list a two-place jet trainer, although the contract has not yet been let.

Navy schedule follows:  
 4 Greenies—ETP and ESR



### GIANT PREPARES FOR FIRST FLIGHT

Leclercq's Conquestaire is shown being poised in preparation for its first test flight scheduled for November 9. Built for the Navy, the quest transport is now undergoing high speed taxi test preliminary to its initial flight. (Navy photo)

► **Chamber Vaughn**—F4U  
 ► **McDonnell**—FD-1 and FD-2, both jet-propelled fighters  
 ► **North American**—F1, similar to AAF's P-81  
 ► **Goodyear**—F3C  
 ► **Curtis-Wright**—XBT2C, SC-2  
 ► **Douglas**—XBT2D, same as the AD-1 and AD-2 Skyraider all-purpose bombers; JD, Navy version of A-26, used for target towing and other purposes  
 ► **North**—AM-1 Mauler, all-purpose bomber; PBM-3 Marmon; JRM Marmon; XPAM, combination jet-propulsion bomber  
 ► **Fokker Aircraft**—XSCX, shipboard observation; XTR, trainer version of same plane  
 ► **Lockheed**—P3V patrol plane such as the Turbocorvette  
 Navy orders for biplanes have been placed with Schuett, Hawk, Bell and Pacesetter.

## Decca Navigation Seeks U.S. Operation

Applies to FCC for use—radio navigation aid; plan commercial use of system

Efforts to achieve automatic flight and landing have been increased with the application to the Federal Communications Commission of Decca Navigation Co., Inc., for permission to demonstrate a war-borne radio navigation and traffic control system which is effect auto stop "air traffic" for planes to follow.

The navigating system relies upon a master transmitter and two or three "slave" stations which send out continuous signals, the intersections of which indicate a plane's position. Ordinarily, the course is plotted on a map which is overlaid with numbered red and green lines. The radio signals are received as the aircraft on a ground unit which indicates a red and a green meter, one for each of the two slave stations. A third slave would require a third meter.

**Fix by Numbers**—On the meters pointers indicate certain numbers by referring to the corresponding numbers on the map, an instant position fix is given by the intersection of the numbered lines.

Accuracy within 30 ft. up to 50 miles from the transmitting station is claimed. At a distance of 1,000 miles, accuracy varies up to 500 yd.

An extension of this automatic plotting system calls into play a Traffic Control Unit based by a



**Center in on Track**—One of the key parts of the Decca navigation system is the Track Control Unit. Labeled "D-1" is the center indicator whether plane is on or off the track. Each division measured by the pointer represents 200 yards. Windows in the right of this dial give a continuous series of data as indicated during the flight. Small dials to the left are used by pilot when approaching an airport. Depending on instructions from the tower, he sets the pointer to a number either for the approach or for a holding pattern. He then resorts to pump by the track indicator.

large dial with a pointer centered on zero. The pointer will swing to the right or left of the dial as the plane goes off course in either direction. The dial is graduated in units of 200 yd. To use this device, the pilot must follow a previously assigned track which is one of the numbered courses that ordinarily would be obtained by consulting the map.

Aim included in the Traffic Control Unit are two smaller numbered dials, one for a landing approach, the other for a holding course while awaiting turn to land. Upon approaching an airport, the pilot calls the tower and asks instructions. If he is free to land, he is given a numbered track, sets the pointer as his approach dial on that number and then sets orders in the large dial and holds the pointer on zero to make a proper descent. If he is to be held the tower gives him a number on the holding dial.

**100 Lb. for Airships**—For airship use, the Decca system would call for about 60 lb. of equipment in the plane, for other aircraft use, a lighter, 30-lb. unit can be used. The equipment would be tested, but not sold.

The system is the invention of two Americans, Harvey F. Schwartz, now president of the company, and William J. Griffiths, a doctor, who worked it out from 1938 until its first demonstration in 1943. It has been developed and built by a British firm, Decca Navigator Co. Ltd., of which the

newly-formed American company is a subsidiary. The U. S. company is located in New York City.

The proposal made to FCC is for the creation of a master transmitter for New York City, and three slaves near Kingston, N. Y., in northern New Jersey, and on eastern Long Island City engineer of the company, D. R. Taylor-Band, estimates that the transmitter could be completed within five months of obtaining frequency assignments for FCC.

## Lighplane Jato

JATO for personal aircraft may be offered for Airport Engineering Corp., Arpa, Cal., which has set up a marine Experimental test stand runs of a 100 lb. thrust JATO rocket having a power duration of 24 sec. now are being made and flight tests with a HP-13 are expected to begin in December. A prototype prototype is expected to reach about 20 ft. The unit probably will be identified as Airport's "Baby JATO" for control with the company's recently certified transport JATO engine, which weighs 200 lb. and delivers 100 lb. thrust for 12 sec.

C.A.A. certification of the JATO engine has resulted in world-wide inquiries from air transport operators, according to R. E. Nowlan, Airport sales manager. First orders were made from Switzerland, where the Swiss Air Force will conduct JATO tests.

## ALPA Eyes American, Eastern As TWA Strike Drags On

Airline wage committee has no answer to new pilot demands; hope for government operation of grounded airlines dim.

By BLAINE STURRISFIELD

The Airline Pilots Association, having grounded Trans-World Airlines, today said with a weekend ultimatum to the union and a solid strike on the job, is getting set for a second go with American Airlines and a third with Eastern Air Lines.

Thirteen airlines party to the wage negotiating committee, which has power of attorney from all to act for them, met in Washington last week and failed to agree on an effective means of defense against the ALPA, headed by David L. Beltsche.

The Committee, formed to present a united front against ALPA's one-at-a-time tactics, is still functioning, but has not yet widely achieved its objective. Northwest Airlines jumped the traces and made a separate agreement with TWA, and TWA may be forced to do so.

**No Action on MFA**—TWA has made no commitment concerning the Military Pilots Association, whose officers announced, through American News, that they would furnish pilots to replace the strikers, if called upon by the Company or by the Government. TWA operating boards are said to feel that MPA's estimated check-out time for

its members on Signatures and Certifications was optimistic.

American News learned from government lawyers that nothing as the Railway Labor Act, which applies to air transport, would specifically prevent TWA from disarming and replacing its striking pilots. Such imprudent action would likely result in proceedings before federal courts, and sources would not risk an opinion as to the outcome. The National Labor Relations Board has no jurisdiction over air and rail transport. NLRB rendered Decision 83, on which pilot pay is still based, before the Civil Aeronautics Act of 1938, which placed airlines labor under the railway act.

**Cost, Hope Done**—Hope of government seizure, envisioned by TWA, was dim late last week. World House policy has turned against interference except in emergency strikes, which this one is not. However, the State Department is anxious for TWA to get ahead with its development in the Far East, and Administration concern cannot be discarded.

The International Association of Machinists, included in layoff of 18,000 ground workers for lack of revenue to pay them, protested

they were entitled to 10 days notice. TWA lawyers thought the contract called for two-shift (16 hrs.) notice. Company said it would they will pay the mechanics.

In France the Minister of Labor objected to the laying off of 800 non-American TWA workers, and insisted they be kept on the payroll. TWA officials said they had overlooked the contingency, and announced that all contractual obligations everywhere would be met.

**Negotiation Deadlocked**—Beltsche, who with TWA President Jack Frye has been meeting Frank Deacon of the National Mediation Board, refused to budge on his ultimatum, which Frye said was an incomplete statement of the problem, and which Beltsche called a "voluntary prohibition compromise."

Beltsche contends the larger and faster planes, the smaller the pilot cost. Pilots get 6.1¢ per mile on small DC-3s, he said, and are doing 4¢ on Skyliners, and 3.9¢ on the 100-00-lb. Constellation, 4 times gross weight of the DC-3, and because of its speed, earning 5 times as much. Pilots cannot cover down any more, he stated, to meet the little difference between his and the Company's terms.

TWA pointed out that only the pay of pilots figure 4-engine planes in the U. S. is involved and the \$15,200 per year, which they demand would cover one round trip a week from Los Angeles to New York. About 200 pilots on domestic 4-engine planes are in-



As TWA Pilot's Strike Drags On: Jack Frye, TWA president, (left) and David Beltsche, ALPA head-quarter, confer with Frank Deacon, chairman of the National Mediation Board in a fruitless effort to settle the strike now in its second week. Meanwhile TWA

ground employees on a furlough without pay as a result of the pilot's strike. ALPA headquarters in Chicago prohibits the strikers' action which is costing TWA an estimated \$152,000 a day. (Press Ann. photos)



# South Wind

MODEL 921 AIRCRAFT HEATER  
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• Dependability and superior performance gained by thorough tests have resulted in the selection of the new South Wind Model 921—300,000 Btu's per hour—heater in standard equipment to supply all heating requirements, including thermal seating and cabin heating, on the most modern air transports.



• Among the new photos seen in air service on domestic and international air lines are the Boeing Stratocruiser, the Martin 2-02, and the Lockheed 5400.



• While these new modern aircraft are designed to meet widely different operation requirements, they are alike in using only the latest and most highly developed aircraft components, and they all include the South Wind Model 921 Heater as standard equipment.

**Military Aircraft.** In the latest high performance military aircraft, too, the new South Wind heater is specified. Among the new combat airplanes in production on the Model 921 heater are the Boeing B 50, the North American P 82E, and the Lockheed P 2V-2.



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**STEWART-WARNER CORPORATION**  
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## Glenn Martin Urges Private Airports

Solution to the problem of insufficient and overcrowded airports will not be achieved until adequately-financed private corporations are in a position to take over the development and management of major commercial air terminals facilities, according to Glenn L. Martin.

Speaking before the Baltimore Association of Commerce's annual winter dinner, Martin declared that such terminal corporations, if started now, would need three to five years to get into full operation. Meanwhile, he contended, states and municipalities should go ahead with development of adequate facilities for the immediate future lest they compromise fail to realize their proper share of new business activity as the extensive volume of air cargo and passenger traffic increases.

Martin predicted that air cargo ultimately will exceed the transportation of passengers in volume and economic importance to the air carriers, adding that only the surface of the airport business has been scratched. He announced that a \$100,000 Martin pilot plant at Chestertown, Md., is well along with experiments in process procuring of greenhouse vegetables for air shipment.

In another phase of his speech, Martin forecast a bright future for the various types of pure jet and turbine power plants for aircraft, but cautioned against over-optimistic predictions of early practical use of such means of propulsion in ordinary commercial air travel. "The pure jet transport is probably at least five years away from regular service," he said, "and even then it will only be used for extremely high-speed operation."

## Douglas Net Profit Totals \$3,154,142

Douglas Aircraft Co. realized a profit of \$3,154,142, equivalent to \$3.26 a share, for the nine months ending Aug. 31, on sales of \$44,489,500, President Donald W. Douglas has reported.

Included in the net income is an estimated \$900,000 to be recovered from unused excess profits tax carryback on excess profits taxes paid in previous years. Douglas also announced a dividend of \$1.50, payable Nov. 22 to stockholders of record Nov. 8. Douglas has already paid a \$1.00 dividend on Sept. 20.

As of Aug. 31, company's backlog was \$196,677,000, of which 81 percent was made up of orders for commercial products. Net working

capital on that date was \$78,343,900.

Other manufacturers' financial reports:

• **Republic Aviation Corp.**—Profit of \$479,718 for the nine months ending Sept. 30, on sales of \$54,414,604. Included in the income figure is a tax credit of \$972,000. Sept. 30 backlog was \$77,658,000, made up of \$26,614,000 worth of orders for Lockheed amphibians and Rainbow commercial transports, and \$47,044,000 worth of military orders.

Republic's Engineless engine subsidiary, Avco-Engine Corp., Syracuse, had a loss of \$716,197 for the first three quarters of the year on sales of \$1,632,225. President Carl F. B. Roth attributes this to extraordinary reconstruction and engine development expenses. Avco's backlog as of Sept. 30 was \$7,713,890, of which orders totaling \$2,334,900 were from manufacturers other than Republic.

• **Boech Aircraft Corp.**—Sales of \$71,394,568 during the fiscal year that ended Sept. 30. Profit and loss figures are being withheld temporarily pending the final results of contract termination and negotiation, although a full report is expected to be made in about 60 days.

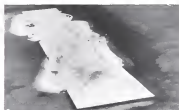
Boech started the fiscal year with a backlog of \$7,800,000 and delivered practically no aircraft during the first quarter, President Walter H. Boech declared. Present backlog is about \$50,000,000.

## Engine Overhaul Time Boosted on Rolls-Royce Jet

Overhaul period of the British-built Rolls-Royce Derwent I jet engine has been increased to 270 hours from the previous limit of 100 hours, the company has announced. This action follows an examination of six engines that had been operated in service for the former time limit. Condition of the engines was such as to warrant the time between overhauls to be raised 90 hours.

As soon as six more engines complete 270 hours of operation they will be stopped and examined to determine whether the Air Ministry will raise the time another 90 hours.

Meanwhile, Rolls-Royce has announced that a Derwent I on a test bed has completed 1,000 hrs. This engine was built in June, 1944. At the end of the first 960



## LAND-BASED CARRIER

Mounted on the short-range fighters with which the U. S. started the war is this \$2,000,000 amphibious carrier dock built in the early days of the war on the coast of French Frigate Shoals, 552 mi. northwest of Hawaii. Purpose was to provide a refueling spot for land-based planes, but before it reached that stage, droppable fuel tanks had made it unnecessary. Now it is being offered as Navy surplus to a general Territory of Hawaii that permits a possible commercial use for its 1,200 ft. runway.





## PRIVATE FLYING

SALES

FIXED BASE OPERATIONS

SCHOOLS

# Spring Steel Landing Gear Proves Attraction on Cessna Models

3,000 Lightplanes sold without failure report on novel gear designed by Steve Wittman; Wichita plant making 38 planes a day.

By ALEXANDER McSHUREY

Exhibiting a toughness which belies their fragile appearance, the new spring-steel landing gear kits of the two-place Cessna models, Models 140 and 120, are rapidly winning acceptance as an important development in the lightplane field.

Since Cessna Aircraft Co., Wichita, began mass production last April, approximately 1,000 of the two models have gone out into the field. Yet the company is still writing for its first report of a serious landing gear failure. This is a record not, to our knowledge, equaled by any other fixed landing gear.

Wittman's Design—Adapted from a design by Steve Wittman, well-known racing pilot, the undercarriage is simple to install, requires virtually no maintenance, and offers less drag than most fixed gears. Cessna states its own logic in a single piece of chrome molybdenum alloy wheel. Three cow-cuts, two bends at the ends, some holes drilled and the manufacturing is completed, except for a pre-bush heat treating process.

Cessna has received from pilots which have landed as hard, the wingnuts showed black rubber marks from the wheels, yet no failure was experienced. Norman Blake, Okemah, Okla., Cessna dealer, told the writer that he had demonstrated the landing gear by dropping the 140 plane in from 30 ft. altitude, with no damage.

However the company was convinced it had something through which the gear went on the new plane. Drop tests equivalent to 100,000 bounces, many more than the plane would experience in an ordinary service life, were

made on a typical gear. The drop tests were extended to a 33-inch drop, after completing the required 16-inch drop. Also, fatigue tests equivalent to 1,001,000 normal landings were made on the spring gear.

Current Test-In—Cessna spokesmen say they experienced some unusual low wear on the first six planes, which has now been corrected by using shims to correct the co-ax of the wheels, and by using lower air pressure in the tires.

The landing gear was demonstrated to advantage in a recent flight we made with Al Michael, Vancouver Cessna distributor, from Okemah, Okla. to Wichita. The gear had no trouble despite gusts and wind conditions both during takeoff and landing. The flight incidentally was our first behind the McCleary field-prop, all-atomized fixed high-lift/low-lift propeller built by C. G. McCleary at Dayton, Ohio, is the plant where he turned out solid steel propellers for military trainers during World War II.

McCleary's very thin blade offers a considerable advantage over wood blades of comparable strength in aerodynamic efficiency. Both Continental and Cessna engineers are enthusiastic about the boost in performance it gives without variable pitch considerations.

Excellent Layout—A walk down Cessna's production line shows excellent layout of the 430,460 sq. ft. plant, and very complete machine tooling for all-steel production.

As of October 15, schedules called for 22 planes a day, and

there appeared no reason why production could not be stepped up to at least double the level of desired. There are 1800 employees in the Wichita main plant, and 200 others at the Hutchinson, Kansas, plant where wings are built.

Two new experimental all-steel versions of the pre-war four-place Cessna Airmaster, using heavier spring-steel landing gear than is installed on the little two-place plane, are presently under development.

The larger planes are still many months from production and the company is not releasing any detailed information concerning them.

Don Flower, sales manager, has allotted 15 percent of 140 and 120 production for export and has completed arrangements for distribution in Alaska, Bolivia, Canada, Argentina, Brazil, Chile, Mexico, Pakistan, Uruguay, Venezuela, Belgium, Holland, Switzerland, Norway and Sweden, and already has some planes in many of these countries. The manufacturer requires all its distributors to handle only Cessna planes, and is seeking to put in many of its dealers as possible on the same condition.

Management Skills—James Wallace Cessna, president, recently took over his brother Dwight's interest in the company. They are members of Clyde Cessna, founder of the company. Clyde Cessna flew his first plane at Bend, Okla., in 1911. James Wallace, a young commercial engineer, brought controlling interest in the company in 1953, and the same year won the Detroit News trophy with a Cessna plane.

The dependable, full-container high-wing Airmaster, was the company's mainstay in pre-war days, although a large portion of the company's present position is due to its marketing of the twin-engine powered advanced trainers and transport planes which it built for military use by the Canadians, British and the American government.

The company sold nearly 4,000 of the U. S. 4, as well as thousands more for export. The company no longer makes this plane, first developed as the T-50, and later known variously as the C-50, Bobcat, AT-4, AT-7, and B. plane, and due to its complete machine tooling for all-steel production.

As of October 15, schedules called for 22 planes a day, and



Charles Four-Place and Engine: The Airmaster-built four-place Charles Ace, now undergoing first flight tests in England, is attracting considerable interest in India, and may be manufactured there if desired. Maximum price of \$2,500 (about \$2,800) has been set in India. Prototype is powered



with 125 hp Lycoming engine. Production version is to use more British-built Humber four-cylinder engine shown in front view, rated at 140 horsepower for about \$2,500 plus \$15 horsepower of 2,000 rpm. (McGraw-Hill World News and British Consulate photos)

## Bright Future Seen For Indian Flying

Government subsidized flying clubs stimulate production of private pilots; Motor Air enterprises expanding.

By JOE VAN DENBURG, JR.

Boakey (McGraw-Hill World News)—Personal aviation in India is expected to grow rapidly from its present small size as Government-subsidized flying clubs in each of India's eight major cities get additional equipment and instructors.

Each club receives an initial subsidy of 40,000 rupees (about \$15,000) plus five rupees an hour for total club time flown in excess of 1,000 hours a year, and 250 rupees for each member who gets a private pilot license. Flying time costs the club member 30 rupees per hour, but elsewhere under 25 years old get a direct subsidy of 15 rupees an hour, while older members get a 5 rupee an hour subsidy.

Exclusive of military pilots, in a half-year more, India will only 100 private pilots and 135 transport pilots. Most club flying is done with surplus Spitfire Marka and U. S. L-5s. Twenty-seven fields are open to civil aircraft, with concentrated lines using the same fields. With the exception of the Karachi airport, commercial traffic amounts to only a few flights daily and flying club activity is suspended during these periods.

Vigorous Leadership—Aviation Air Association, wartime development of 29-year-old Ravi Narai, is taking a vigorous leadership in promoting India's personal aviation. Narai is associated with Charles

Aircraft, Ltd., of Heston, England, manufacturer of the new four-place Charles Ace. AAA also is the exclusive India-Burma-Ceylon representative for Bendix products, having manufactured Bendix communications equipment during World War II. Associated Corp. of India, another AAA subsidiary, is exclusive India-Burma-Ceylon agent for the British four-place Percival Proctor, and is looking for additional sales. Yet another subsidiary, Motor Airways, has a fleet of 15 converted Douglas C-47s and 12 Northway Monarchs.

Narai is making arrangements to establish a manufacturing plant for the Charles Ace in India, as soon as demand there warrants wing production. Plans at 2,500 rupees (about \$2,800) the Ace is preparing for initial test flights in England. The prototype is powered with a 125 hp. Lycoming engine, but the production model is to be equipped with a new 150 hp. Humber engine. The high-wing tri-cyclic-trail wing monoplane, which has simplified control is credited with 110 mph cruising speed, 43 mph stall speed, 33 ft. turn climb and 200 mph cruise. (Additional details on the Charles plane were published previously in AVIATION NEWS, May 20.)

The Ace can be packed in a shipping crate 21 x 4 x 5 ft. with 1,200 lb. gross weight. AAA officials are enthusiastic about the Ace's chance in the Indian market as well as in Great Britain. They expect to have its components trip-tested for India, as much as possible. Experience with plywood-construction, Percival Proctor delivered in India has shown a tendency for exterior surfaces to swell and warp under Indian rains and sun, the agency reports.

Design Transport—Another aircraft in design plans sponsored by AAA, is a two-engine 67-passenger executive liner, expected to have a good market among Indian business men. Air travel represents the most comfortable and best means of travel as well as the quickest in India, since few of the highways measure up to second-class U. S. roads, and the railway system offers many delays and inconveniences.

Right month in the year there is almost uniformly clear weather, while in the other third, the rainy season seriously curtails any contact flying. Since private licenses are available in India as soon after sale as the pilot is able to pass his flight test, this offers an added incentive for rapid growth of personal aviation in India.

## Softening Market Trend in Lightplanes

Possible indication of a "softening" of the market for personal aircraft was seen in the Cessna Bureau figures of plane deliveries in August. While deliveries jumped appreciably over July, cancellations were quick to point out that new sales had not kept pace as the backlog for the two-place plane dropped 951 and that for the three- and four-place aircraft was of 145. Another index of a decreasing domestic demand for lightplanes (see Briefings), are reports from manufacturers' export sales representatives that they are now to obtain greater allocations for sales overseas. Until very recently, practically all production was pre-empted by domestic distributors.

Deliveries of completed aircraft

In August totaled 4,790 valued at \$32,400,560, the Census Bureau reports. Of that, military planes numbered 197, valued at \$9,733,265. Total August shipments increased 38 percent over July, although value increased only 7 percent.

Booked on Aug. 31 was 49,904, a decrease of 3 percent during the month, although dollar value of the backlog, \$1,321,916,261, was slightly over the July 31 figure of \$1,139,482,212.

Of the 4,683 civilian planes shipped, by far the largest proportion, 4,653, were single-engine personal-type aircraft of from two to four places. Two and four engine planes produced during the month totaled 33. At the end of the month, backlog of two-place planes was 31,504, and of three- and four-place, 14,487.

Census Bureau figures showed an increase of employment in aircraft plants of 6,941, from 149,318 in July to 156,259 in August. However, the August figures include more plants than were covered in the July report.

## Michigan Flying Farmers Are Organized at Lansing

Despite poor weather, 150 rural pilots and passengers arrived at Capital City Airport, Lansing, Mich., recently, in 45 planes to form the "Michigan Flying Farmers" organization. They were greeted by officials of Michigan State College, which with the



1947 STINSON VOYAGER 150:

Stinson division of Consolidated-Vultee Aircraft Corp. has re-designed interior of its four-place Voyager 150 in the 1947 version. Photos show interior panel and luggage upholstering of deluxe model to be available in December. A "station wagon" model for farmers and ranchers, with reasonable seats for cargo carrying, will be available next spring. Another 1947 innovation is cabin air-conditioning controlled from the panel.



## FAIRCHILD ENTRY:

Artist sketch of the new Fairchild all-metal personal plane, tentatively designated F-47, to be built at the Fairchild Personal Planes division plant recently acquired at Winchester Field, Windsor, Ken. Shows conventional low-wing monoplane with retractable landing gear, and single tail. Plane bears some resemblance to the Fairchild M-14, experimental prototype monoplane but not manufactured. The F-47 is to be powered with a Continental 140 hp. engine and to have a cruising speed of around 150 mph, reports say.

Michigan Department of Aeronautics and the Michigan Farm Bureau, sponsored the gathering.

William S. Stout, aeronautical designer and chairman of the Michigan Department of Aeronautics, Col. Floyd E. Evans, department director, Dr. John A. Hunsick, president of M.S.C.; Matt A. Blanton, secretary-treasurer of the National Flying Farmers Association, and Ernest L. Anthony, M.S.C. dean of agriculture, addressed the group.

A board of directors was elected for the new unit as follows: Dave

Friday, Northland; Ernest Iwan, Clare; Earl Gehman, Farmville; and Healy Russell, South Creek. Officers chosen were: Lee Tallala, Milan, president; George E. Seydian, Adrian, vice-president; and Carl Mironowski, Berntz, secretary-treasurer.

## Fairchild Trainer Meets New Need

First of a planned postwar group of service training planes which will be larger and faster than those used by the Army and Navy during the war has been flown by Fairchild Regue & Airplane Corp. which built the XHQ-1 for the Navy.

Fairchild was awarded the contract for three of these planes in competition with other manufacturers. North American Aviation is also building a somewhat similar Navy trainer. AAF has likewise called for bids on a new training plane, heavier and faster than the XHQ-1. While the Fairchild plane is a primary trainer, AAF's proposed plane will replace primary and basic trainers.

Beyond the plans for new training planes is the fact that during the war aircraft speed and maneuverability jumped to heights that the transition to civilian planes from usual training types is too sharp. It is anticipated that AAF expects to grow advanced instruction in P-51 fighters and B-

25 light bombers, two of its hottest aircraft. Also illustrating the trend toward higher performance trainers is an AAF schedule for two-place jet-propelled trainers.

The XHQ-1 for the first time in a primary trainer has retractable landing gear, operated electrically, and a Hamilton Standard controllable pitch propeller. Its bubble-type canopy, covering both of the seats, is also an innovation and is claimed to have increased visibility that should reduce collisions.

Powered by a Lycoming 250-hp. engine, the plane has a top speed of 150 mph, a stalling speed of 53 mph and climbs at about 1,200 ft. per minute. Weight is 2,700 lb., span, 41 ft. and length 25 ft.

In drawing specifications for the new trainer, Navy studied closely experience with primary trainers during the war and established requirements with a view toward increasing clearance of pilot error and other accident causes arising from design.

## New Drain Valve

A new type of oil drain valve announced by Koolhae Aviation Products Co., Dayton, Ohio, provides a shield for mechanics servicing lightplane engines. The CAA-approved valve is a permanent installation, self-actuated, the company says, and permits draining of the oil sump by simply opening the valve, eliminating the messy job of unscrewing the sump plug whenever an oil drain is needed. The valve is threaded to fit all light Continental engines.



## CESSNA FABRICATION:

Interior of fuselage of Cessna's two-place all-metal personal plane showing the stressed-skin construction. No internal struts are used; the aluminum skin being wrapped around the bulkheads and crimped together.

## Briefing For Private Flying

1950 BOEINGA CRUIERS—Boeing Aircraft Corp. last week announced receipt of more than 1,000 purchase commitments for the four-place Model 38 Bomber, which is expected to be in production "within 30 days." Deliveries will be made in response that purchase orders are received, with production expected to reach 10 a day by next Spring. On a basis of the \$7,345 price announced for the butterfly-tail personal and executive plane, this would mean a backlog of over \$11 million for an airplane which at last reports had not yet completed CAA certification.

GATY PHILOSOPHY—John F. Gaty, Boeac executive vice-president, sees the Bomber 38 as an executive transport primarily, rather than a private plane, although naturally Boeac isn't turning down any personal plane orders. On the basis of the company's sales of Cessna's Boeac 28, Gaty sees a much larger potential market in industry for planes in the Bomber price and performance class. There are thousands of business executives who can use high speed personal transportation to business advantage, but who can't afford the \$20,000 it takes to own a twin-engine Boeac, so to speak if after they get it. But they can well afford to buy and operate the Bomber, Gaty says.

QUIETER PLANES IN '47-'48—Further from research going on among the personal plane manufacturers, the 1947-1948 crop of personal planes ought to be considerably quieter, inside and out, than the first war-up postwar jobs. Co-Motors Motors is reported manufacturing a series of units on various mufflers on their engines, for several manufacturers to determine operating characteristics and effect on the engine. CAA-soundproofing is becoming increasingly important now that the first airline's market is beginning to open up. Little, and the distributors and dealers are actually having to put in more sound seals to the customers. This still leaves the proper, blanket vision in the same picture, unaccounted for. But after a series of talks with manufacturers of planes and propellers, we will have been able to find one who shows that the proposed NACA eight-blade prop can be manufactured with less than a prohibitive cost, by using nothing of square in case of a nine-oval. Isn't there some sector way?

CANADA MARKET—A recent study of the personal plane potential in Canada, by the Financial Post, Toronto, showed nearly 400 light-planes had been purchased since last November, with a value of approximately \$5,000,000. This was against a previous average sale of approximately 100 a year, of \$300,000 total value. The number of Canadian pilots has increased to 3500 from 1500 in 1935. Between 1945 and 1946, 196 planes were sold, but only 100 were built. The value of these were more aircraft. Overall sales at the recent three-day Toronto air show amounted to \$250,000, the study showed. The Aeronautical Institute of Canada is urging the Canadian government to speed up an airport program for developing 100 Canadian flying fields, which is expected to increase greatly the utility of personal and business planes in Canada.

BILL ONG AIRLINES—In answer to some of the accusations made by J. B. Hartsfield, general manager of Airport Operators and Pilots Association, is his talk at the recent National Aviation Clinic (Aviation News, Oct. 21) about enactment changes. Bill Ong, Kansas City fixed base operator, and former NATS president, came back with a steady deluge of many operators. Ong attributes most of the unreasonable demands, failures to estimate costs, etc., mainly to the "bush-lore" operator who does not have an extensive base of operations. He urged flyers to go to established operators for fair treatment. The question of return of deposit would be asked, he declared, if the manufacturers would take off some pressure on their dealers and distributors to provide a big backlog of orders even if they can't deliver the planes. Over an operator's delays, deposits, and orders that, it is true, have to be paid down. He attacked a bill-line change proposed by Hartsfield, as "You then we pay for labor."

—ALEXANDER McSABRE

# DEPRESSION IN '47?

## ... controls can bring one

IT IS CONVENTIONAL for the American business man, who values freedom to protest against government regulation. On this account, many people who do not know the facts in detail are inclined to discount current business protests against the post-war application of wartime economic controls. This is particularly true since in his report for the third quarter of this year, the Director of War Mobilization and Reconversion implied that business is in fine health by remarking that "business profits, after taxes, are at the highest point in history."

In explaining about government controls, however, the American business man is not crying wolf. These controls were an essential war weapon. Now, however, they are contributing decidedly to a twisting and distorting of the American economy in a degree which, if not soon corrected, may well start production and employment down the toboggan.

One general indication of how badly twisted our economic system has become is found in the wide disparities in the amounts by which different groups of prices have increased. Since 1945, for example, farm prices have advanced an average of about 32%. Industrial prices, more tightly controlled than any other group except rents, have increased only about 32%. Meanwhile, straight time hourly earnings of industrial workers have gone up about 49% and the cost of living about 43%.

The advances of individual prices within these groups have also varied immensely. Among industrial prices, that of finished steel has gone up only about 14% since 1945, while lumber has gone up over 56%. Hourly wage rates in the women's garment industry have gone up 116%, while those in the brewing industry have gone up only 32%. That share of the cost of living due to rent has gone up only 4%, while that due to the cost of clothing has gone up over 68%.

Well, What Of It?

At least four things of major importance:

1. Production, under the influence of price control, has been heavily concentrated in some

lines to the neglect of others. Result—unbalanced production, unbalanced inventories, and a serious cut in the flow of goods to consumers.

2. More or less uniform post V-J Day wage increases, promoted by the federal government, have imposed a far more serious cost problem on some industries than on others. This is particularly true of some of the most basic industries.

3. While, as a whole, "business profits, after taxes, are at the highest point in history" (due in part to a temporary excess profit tax rebate arrangement) there are serious disparities in the profits of different industries. Some key industries are making little or no profits.

4. If not corrected, the distortion of prices, wages and production, which has resulted in such a wide disparity of profits, can contribute decisively to a major business upset.

The most striking example of the distortion of production by controls was, of course, that provided by a metropolitan meat famine at a time when beef cattle crowded the ranges. This has now been recognized. But there are many other distortions. Abundance of sports clothes, acute shortage of more essential clothing made from the same kind of cloth. Successive shortages of critically important products like baking wire and nails as the price lid on steel is jiggled first this direction and then that.

Some of these distortions of production are due to material shortages. But a major contributor is uneven application of controls, and the total removal of some while others are held firm. Among the results are hulking inventories of partially completed assemblies and shut-downs while waiting for parts.

### Wage Complications

While price controls, unevenly applied, have distorted production first this way and then that, the federal government has further complicated the situation by promoting uniform wage rate increases without regard to varying capacities to pay them. The greatest single contribution to this distortion was made by the President himself. In the course of

unconsciously trying to anesthetize the despite over steel wages last January he recommended a wage rate increase of 15% cents an hour. Immediately that increase was accepted by organized labor as pay for the first round of wage adjustments during the mission of the White House itself. The game then became to beat pay.

But the majority of different industries to pay wage increases varied greatly. During the war some had asked their pay much more than others. Moreover, in some industries wages are a much larger element of total cost than in others. In 1939 (last year for which figures are available) wages ranged all the way from 24% of total sales in cigarette manufacturing to 34 3/4% in heavy manufacturing and 45 1/2% (for wages and salaries combined) in soft coal mining.

Under these circumstances, some industries were far less able to meet a uniform wage increase than others. Nonetheless, many of them had uniform wage increases imposed upon them. Then the price lid was held firm. This, coupled with material shortages and production difficulties which also choked output, squeezed the profit right out of these industries.

### A Study In Contrasts

Some of the most important industries are making little or no profits while they keep along on a production volume which fails to meet consumer needs and prevents attainment of maximum efficiency. The automobile industry affords one conspicuous example. Another is electrical manufacturing, and rail equipment is yet a third. All of them are crucially important. Many other lines of business, of course, are extremely profitable. For example, the profits of a group of large retail stores were 150% higher during the first half of this year than they were a year ago, the profits of a group of motion picture companies were up 140%.

In the meantime, the workers in some of these low-profit industries are in no bad of case. The increase in the cost of living since 1945 is now outstripping the increase in the hourly wage rate of workers in a number of industries, where wage rates have not risen as much as the average. On a weekly basis, a shorter work week, with less overtime, has coincided with the recent upsurge in consumer prices, to place the living standards of some of these workers below the wartime level.

Such circumstances obviously create pressure in the ranks of these workers for another round of wage increases. But as long as the profit increases squeezed out of their industries wage increases, if

any, must be translated either into higher prices, or, if the government sits tight on the price lid, into losses which will discourage production and ultimately cost workers their jobs.

### What To Do?

Solution both for the workers and for employers in the relatively profits section, a peculiarly important group of industries, must be looked for primarily by increasing productivity, thereby decreasing the cost per unit. Part of this higher productivity can come only from individual efforts of the workers themselves. Another part can come from an elimination of bottlenecks in materials and parts which prevent the labor force from working most efficiently. Only by greater output per man-hour can workers and management solve their common problem.

Until productivity has been thus increased, it is hard to think how the federal government could do a greater disservice both to labor and to industry than to repeat its performance of promoting a uniform national wage increase. With the present distortion of the national economy, some industries might again take such an advance in their stride. With many others it would mean even greater havoc.

While avoiding like the plague provision of another uniform wage adjustment, the federal government must make it a primary objective to relieve distortions caused by the uneven application of other controls, primarily price control. Nature has given a lift to the elimination of distortions by providing bumper grain crops which should at once reduce that staggering disparity between a 125% increase in farm prices and a 32% increase in industrial prices. But that process must be speeded as a matter of economic policy. No element of such a policy is more important than expediting the decontrol of industrial prices. Such a course is clearly essential to achieve that balance in the production of materials and parts required for maximum output.

Business and labor both want a sustained prosperity in which all will share. Sustained prosperity can be achieved only if we eliminate the distortions in wages, prices and profits which now restrain so much vital production.

*James H. McGraw, Jr.*

President McGraw-Hill Publishing Company, Inc.

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## PRODUCTION

### U. S. Dollar Loan Program Seen Bolstering Export of Aircraft

Latin American credits to Pan-American, TACA, Panair do Brasil and Aeronautical Radio de Mexico granted by Export-Import Bank.

The U. S. has embarked on a program of dollar loans to foreign countries that is seen as having considerable long-range importance to the domestic aircraft industry. With the cessation of lend-lease, many countries found themselves lacking the exchange necessary to buy products essential to their recovery. Extension of credit will ease this foreign exchange shortage and increase the possibility of their becoming even larger customers of the U. S. aircraft industry at a future date.

The U. S. is best equipped to help out these countries on their feet and already has made available large sums. However, a comparatively small amount of these credits will be used directly for the purchase of aircraft, according to a survey and analysis prepared for Aviation News by John D. Wilson of McGraw-Hill's Business Staff. **Eight Billion Credits**—"The general total of such credits to date," Wilson says, "is approximately \$5.47 billion. But a large part of this has gone to finance the disposal of surplus property (\$3.60 billion) or to wind up the delivery of lend-lease goods that were left in the pipe line when lend-lease was abruptly terminated (three loans total \$2.49 million)."

From the standpoint of expenditures yet to be made, the important credits are those listed for reconstruction and development. Great Britain, France and the Netherlands are the largest holders of these credits, although most of Western Europe also has received them. Such Arabia and Chile and Brazil in Latin America are other recipients of important credits.

In some cases U. S. aircraft producers are benefiting directly from this loan program, Wilson points out; in other instances benefits

come indirectly through the easing of the general shortage of dollar exchange.

**Plans Expanded**—A few loans that far made for reconstruction and development are earmarked for aircraft and accessories, Wilson's data shows. The most recent report of the Export-Import Bank lists only five purchases authorized as of October 1. Four of these are for Latin-American operations. They include \$25 million to Pan-American Airways for materials, equipment and services, \$5 million for Panair do Brasil to spend on Airline equipment, \$62,500 to be spent by TACA Airways for aircraft, engines, and accessories, and a credit of \$3 million to Aero-factural Radio de Mexico for an survey meteorological and communication systems in Mexico 3a

addition, a proposal of the Turkish State Airways to purchase aircraft equipment at a cost of \$5,000,000 has been approved.

Neither the British nor the French are spending much of their large loans on aircraft. By the very nature of the credits they are more likely to purchase equipment for their own aircraft plants. The Dutch, however, are providing a number of civil aircraft here, a recent order having been placed for 13 Convair 440 transports. Details released regarding reconstruction loans thus far made in China, Finland, Greece, Italy, Poland, and Saudi Arabia indicate that none are to be used for aircraft purchases, Wilson states.

The \$1,464,000,000 British loan also is important to U. S. exporters. Wilson explains that Britain's financial position has been such as to make necessary the maintenance of exchange controls that prevented many foreign countries from buying extensively in the U. S. These controls now are to be relaxed, and India, Australia, South Africa, and other Empire countries will be more free to buy from the country.

**Large Sterling Balances**—On the other hand, a number of countries now hold very large pound sterling balances in London (chiefly the Empire countries, Norway, Netherlands, Egypt, and Argentina). These assets have been wartime purchases by the British which



### PROGRESS ON THE BRABAZON

Last photo Aviation News published of the mammoth British-built Bristol Brabazon 1 eight-engined airliner, on June 24, showed the fuselage sketched in the construction dock. Here in the latest picture of the 120-passenger behemoth with most of the metal skin on the skeleton. Soon the fuselage will be mated from the present 260 by 183 ft hanger to a new building, claimed to be the largest hanger in the world. (AP)



# KLM ROYAL DUTCH AIRLINES

## orders a fleet of 12 New Convair-240's!

KLM Royal Dutch Airlines, with its vast network of air routes serving 40 continents, is the 10th major airline to order a fleet of America's most modern twin-engine airliner—Convair-240's.

KLM selected the Convair-240 to fill its need for an intermediate-range transport plane to supplement its 4-engine planes, and to offer the advantage of 380-mile-per-hour speed and such ad-

vanced comfort features as air conditioning and jet-powered engines.

The new Convair-240 airliner will be in service by mid-1961, on KLM, as well as on American Airlines, Pan American World Airways, Western Air Lines, and Continental Air Lines. It will carry 48 passengers with a new high standard in air-travel comfort and convenience. Watch for it!



Why  
you'll enjoy  
flying in the  
Convair-240

1. **Air-conditioned comfort.** Completely air-conditioned. Cool air, with controlled humidity—no hot-dry, cold-dry feeling—means your comfort winner or loser!
2. **48 Passengers—on 208 sq. ft.** With two 2400-hp. engines you arrive at 360 miles per hour.
3. **Auxiliary jet-aided thrust—no added speed!** The Convair-240 is the first commercial transport plane to utilize the modern principle.
4. **Reversible-pitch propellers for smoother landings.** In addition to hydraulic wheel brakes and wing flaps, the Convair-240 has reversible-pitch propellers that come in to a full stall in a much shorter distance.
5. **"Low level" flight comfort at high altitudes.** Cabin air pressure, at altitude, fully controlled for passenger comfort regardless of altitude.
6. **Round wings prevent injury!** The Convair-240 uses the air-saving safety system designed for combat

planes by Consolidated Vultee during the war. Wings and tail are rounded—no sharp edges or sharp ends on cockpit.

7. **Low level!** The Convair-240 lands, and is in full level when a corner is at 40 ft.

8. **You take it easy—the auto-lift!** A newly designed type of air-lift seat gives you all the leg room you want. There's no bumping your knees against the seat ahead.

## Aircraft Shares Top V-J Day Level Despite Market Slump

Group action better than other industrials despite drops of 32 to 56% from year's best prices; shares sailing below liquidating value of working capital positions.

Aircraft shares have participated in the general market decline that has affected all securities but nevertheless remain at higher levels than those prevailing on V-J Day. The 1946 market action of twenty aircraft and aircraft equipment stocks reveals a decline that ranges from 32 percent to 55.8 percent from the year's best prices.

As a group, aircraft shares have acted much better than other industrials. A prime reason has been that the aircraft manufacturing stocks did not fully participate in the wild, inflationary movements that accompanied the other groups. Most aircraft shares are selling at substantial discounts to the liquidating value of their working capital positions. The portents outlook of the industry is no longer considered barren and adjustments have been made from the banking which visualized the industry profitable only when it had been orders.

► **Meritor Goodness.**—The Glenn L. Meritor Co. shows the smallest decline from its best 1946 price, 34 percent. This is undoubtedly a reflection of the large scale commercial orders the company has received in its bid for transport business. It is also interesting that at current levels, Meritor is selling about 49 percent higher since V-J Day. The company has also been maintaining a quarterly dividend of 13 cents a share in recent years, which if continued, gives the investor a return of better than 8 percent on his money.

One of the worst performing aircraft stocks is Beech which fell 56.8 percent from its top 1946 price. This company displayed a good deal of speculative flavor through sea-venture activities. Association with house construction and the discovery of oil on its properties stimulated a good deal of speculative buying. In the final analysis, however, sound power will determine stock price values. It is probable that the earnings of \$4.31 per share reported for 1945

will stand as a peak for many years to come. The company only earned 38 cents a share for the nine months ended June, 1946. Beech has also been confronted with wholesale cancellations on its new model 340-B-C. Delay in delivery of this production may have caused important markets for the company.

► **No Pattern.**—There has been no particular pattern established by the aircraft accessory companies. Virtually all of them sell their products to other industries and have diversified lines. De-Cat-O, specializing in machine tools, has been relatively stable. It has major orders in the automotive trades. The company's stock declined but 41.2 percent from its best 1946 price. Interestingly enough, this price is about 15 percent below that prevailing on V-J Day. In other words, it is quite probable that the company is viewed as potential beneficiary in automobile production and its prospects amply discounted prior to the end of the war.

Square D, specializing in hand electrical equipment lines, and having greater diversification, has fared much better. The Kallman line of instruments are, of course, represented in the company and provide entry into the aviation industry. Square D has, nevertheless, displayed remarkable stability. Its decline has been less than 39 percent from the top 1946 price. It is now 35 percent on the V-J price. Securities given to stable levels in the period ahead.

Dodge and Thompson Products have both declined about the same, 44.4 and 44.5 percent, respectively. It is interesting to note that Dodge is off 34 percent from its V-J price while Thompson declined only about 10 percent. Presumably the greater association with the auto industry has accounted for Dodge taking on the characteristics of that group. Thompson was fortunate in obtaining its 5 percent preferred stock issue with a 4 percent rate when market conditions were

right. This has been of direct benefit to the company equity. ► **Deficits Shown.**—Lockheed and Convair, under active consideration for merging, have had almost similar market action, declining 44.4 and 43.5 percent, respectively. Both stocks also are on an average of 15 percent above their V-J prices. Further, both companies showed substantial deficits then for that year. Lockheed lost \$434,430 during its first quarter of the year. This was largely due to the modifications found necessary on the Constellation. However, a backlog of \$183,606,099 as of Sept. 30, 1946 affords the company with excellent prospects of retaining its profitable operations during the second half.

Convair has not revealed its first six months results, but is known to have had a loss. The merger of Lockheed and Convair will provide a number of interesting problems in the exchange of securities and will no doubt give the investment fraternity many opportunities for change and adding to the capitalization of the two companies. It will also be combined to make one of the largest in the aircraft industry. Lockheed currently has 1,978,065 shares outstanding owned with 1,570,900 for Convair. The latter company previously had a preferred stock issue outstanding but by forcing conversion required the entire series.

North American Aviation, with its largest market share on a standing in the aircraft industry, 3,435,906, has declined but 36 percent from its 1946 top price. It is also about 32 percent above its V-J price. About one-fourth of the company's stock is owned by General Motors which in effect reduces such number of shares as an active market factor. It is probable that as the company's power expands, more shares will be automatically projected, hence the deflationary adjustment was less severe.

► **Adjustment Period.**—As the various maladjustments are corrected and sound foundations more correctly appraised, more stable market prices should be established.

### Ryan Backlog

Ryan Aeronautical Co.'s backlog of orders for exhaust manifolds and engine modifications for recent additional orders amounting to \$300,000. Douglas, Boeing, Lockheed and Consolidated Vultee placed the bulk of the new orders.

## Consolidated Vultee Aircraft Corporation

San Diego, California • Downey, California • Wayne, Michigan (Gleason Division) • Fort Worth, Texas • Nashville, Tennessee

## SPECIAL AIR SERVICES

CHARTER NONSCHEDULED INTRASTATE

# Nonscheduled Carriers Get Small Slice of Air Passenger Business

Commerce Dept. survey shows certificated airlines flying 98.4 percent of all air travel; 125 uncertificated operators make total profit of \$202,494.

By CHARLES L. ADAMS

In striking contrast to surveys showing that uncertificated cargo carriers have captured the lion's share of the airfreight business, a new government study reveals the small degree to which nonscheduled operators have penetrated into the country's passenger transport field.

An analysis completed last month by the transportation division of the Department of Commerce shows that during May and June 1953 nonscheduled carriers emphasizing passenger service flew about 1.4 percent of the passengers and 1.5 percent of the passenger miles recorded by the certificated domestic airlines in the same period. The study, part of an overall survey of domestic air passenger transportation, was based on reports filed with CAB prior to Sept. 1 in accordance with amendment No. 3, section 292.1 of the Board's economic regulations.

**Data incomplete.**—Data on which the nonscheduled phase of the

study is based admittedly are incomplete, but it is believed the picture obtained would not be changed materially by more inclusive statistics.

Of the 252 reports analyzed, 41 were by carriers using transport planes of Lodestar type or larger and the remainder by lines using small two-engine and single-engine equipment. Among the operators of the larger transports about 80 percent owned fewer than four planes. Fifty-seven percent of the companies operating the smaller craft owned less than four planes.

With more equipment now available to the certificated airlines prospects are that the uncertificated operators will carry a steadily diminishing proportion of the total passenger volume even if CAB does not crack down further on nonscheduled services. The study's caveat, which described a lucrative nonscheduled business in some routes early this

year, has vanished in most instances. Certificate holders are again pushing sales and advertising efforts which uncertificated companies cannot match, because of smaller resources and CAB restrictions.

**Urges Second Class Service.**—The Commerce survey suggests that nonscheduled carriers will probably find their most effective area of competition in the provision of a second-class "day coach" type of service offered at proportionately lower fares. Without meals, reservations and various passenger "extras," such services would require only a minimum of ground facilities and personnel and thus would fit in with the type of operation developed by most nonscheduled carriers, the study states.

One limited and forty-four currently passenger-carrying operators reported both revenue and expense data for the two-month period requested by CAB. Of these, 255 showed profits at an aggregate \$203,434, while 39 showed losses totaling \$176,293. The proportion of profitable operations was much higher among the small fixed-base carriers than for the operators of Lodestar and larger equipment. More than 80 percent of the fixed-base operators using small equipment showed a profit, compared with 58 percent of the companies using large transports.

Many of the profitable operations in the small-plane category were engaged in non-tramport activities, and it is not known to what extent their favorable financial reports may be attributable to the consequent sharing of overhead and other expenses.

**Plane Data.**—Additional data compiled in the analysis show the predominantly small size of the passenger-carrying nonscheduled companies in terms of employment. More than half of the carriers reporting such data had fewer than five full-time employees.

Of the approximately 500 nonscheduled carriers registered with CAB as of Sept. 1, about 35 were eliminated from the Commerce study because of exclusive or quasi-exclusive agreements with certificated airlines. Also omitted were approximately 315 operators which contained data too incomplete for satisfactory analysis.

## More Safety Rules For Nonscheduleds

Additional safety requirements for nonscheduled air carriers using planes with 600 lb. or more have been drawn up by CAB in the form of proposed amendments to Part 43 of the Civil Air Regulations and are being circulated to the industry for comment.

The changes specify in more detail standards which the Civil Aeronautics Administrator would place in operating certificates issued under Part 43. Since it will require months to process the large number of applications pending for operating certificates, the Board's Safety Bureau believes it necessary to incorporate additional requirements in the Regulations.

CAB's proposed amendments to Part 43 would require that multi-engine aircraft be used for night or instrument operations when carrying passengers, except on routes authorized by the Administrator and specified in the operating certificate. Such multi-engine planes would have to be equipped so that, with one engine inoperative, a climb of 100 ft. per minute at 2,000 ft. above sea level can be maintained with maximum authorized load.

Pilot flight time limitations prescribed for scheduled domestic airlines would be made applicable to nonscheduled operations and would specify maximum daily, weekly, monthly and yearly hours to be flown by a pilot. Pilot pilots on aircraft with 600 lb. or more in which passengers are carried would be required to hold an airline transport pilot rating. A second pilot would be required to have an instrument rating in addition to a commercial pilot rating.

Stronger emphasis would be placed on proper maintenance of all equipment, including engine, propellers and appliances, and it would be the pilot's responsibility to hold or cancel a flight until repairs are made in all cases where he deems it advisable in the interest of safety.

## Freight Case Change

Complaints by some parties to the proceeding have resulted in a shift in the plans for airfreight hearings this month. Two sessions now are scheduled. All parties wishing to present their cases in Port Worth will be heard starting Nov. 16 at the Hotel Texas. All

remaining parties will be heard at Atlantic City, N. J., where sessions will be held at the Chalfonte Hotel, beginning Nov. 25.

## 10% Dividend Is Paid By Pacific Overseas

Declaration of an impressive 10 percent cash dividend—an action almost without precedent among uncertificated carriers—has marked the first anniversary of Pacific Overseas Airline's incorporation.

Stockholders receiving the payment of \$1 a share on Nov. 1 were, with two exceptions, employees of the Ontario, Cal., company, which flew 4,732,000 planes miles in the first year. Mar. 15 and Sept. 30.

During that period, POA completed 252 roundtrips to Tokyo for the Army Air Transport Command, 12 roundtrips to Bangkok for UNRRA, and three roundtrips to Manila for Consolidated Steel Corp. POA operates Army planes on ATC's Tokyo run and uses its fleet of three C-54s for other flights. A fourth C-54 was purchased last month and will be in service soon.

Latest charter operations scheduled by POA are three trips between Washington and Manila for the Philippine War Damage Commission. Thirty-two officers and staff members of the commission and a plane crew of eight made the first flight Manila last week, with stops at Cebu, Honolulu, Nagasaki and Guam. Second trip is slated for Nov. 18 and the third for Nov. 25.

## Mechanics Union Signs Pact With U. S. Airlines

Employee representation matters, unscheduled airlines moved forward last month with designation of the International Association of Mechanics as collective bargaining representative of the mechanics, craft workers and ground service personnel of U. S. Airlines, St. Petersburg, Fla. The U. S. in the second major contract carrier to be organized by IAM, an independent union formerly affiliated with the AFL.



FREIGHTER FOR A DAY:

When a nonscheduled business recently interrupted deliveries of automobile truck beds from the Hagen Mfg. Co. in Grand Rapids, Mich., Kaiser-Fraser Corp. expeditionary crew converted the Pacific overcast transport into cargo carrier to prevent a production slowdown. Miss Kaiser-Fraser employees worked the plane at the Van Nuys field airport adjusting the automobile plane.

contract are now underway. IAM organized Miss Kaiser-Fraser Corp. last February and entered an agreement with the company in May.

## Teterboro Development For Air Freight Soule

A roadshow proposing development of Teterboro, N. J., airport as the principal airfreight terminal in the New York area has been approved by the Aviation Section of the New York Board of Trade recently.

The plan for expanding Teterboro's facilities, with the Port of New York Authority footing the \$168,000 cost, was presented to the trade group by Charles P. Willis, Jr., president of Teterboro Development, Inc. Practical approval contemplated in lengthening the runway an additional 1,000 ft. to permit the field's use by four-engine transport.

Willis and development of Teterboro as the New York area's major freight terminal would help relieve congestion now seriously hampering passenger traffic at LaGuardia field and other airports. Designation of Teterboro as a cargo field would be in line with plans for separate airfreight terminals now being pushed at Chicago, New Orleans and Washington.



SLICK'S "FAMILY":

Under the wing of a 514k Airplane C-46D Cavanaugh are five planes and by carrier extensions or sales purchased—a two-plane Broomer and a seven-passenger Beechcraft Model 18 transport. The Broomer is used almost entirely within Texas, while the Beechcraft is flown to all points on Slick's nationwide airfreight system.

## Air Carrier Group Charges CAB Strangling Nonschedules

## systems between Nov 15 and Feb







## Horse and Buggy Customs

**I**f this is the era, our customs authorities from the top down don't recognize it. Recent experience of the writer at LaGuardia Field and New Orleans' Morant International Airport confirm lumpy plains of commercial tourists and traveling newsmen.

Customs space at LaGuardia, Miami and New Orleans is unbelievably inadequate for the traffic. The staff at each airport is pitifully small. The lack of any personnel to facilitate clearance is notorious at New Orleans.

While the attendants at LaGuardia are businesslike, at least, the New Orleans crew at the arrival of a Chicago & Southern press flight from Havana the other night dived over the baggage, took a friendly but unkind interest in passengers' personal effects while a score or more other attoms stood waiting impatiently for clearance.

One customs attendant took a fancy to a passenger's new automatic razor (made in this coun-

try) and asked to be shown how it worked. Another leisurely held up a souvenir passport and learned for the first time that the Cubans spell it *Holmes*. These are typical incidents, but by no means the only ones.

There are chairs in the outer rooms of both customs stations, but too many passengers are permitted into the baggage examination rooms at once. Little or no attention is given to the aged, or persons with babies and children.

At New Orleans duty was collected from well over half the fifty persons, yet no preparations had been made for this contingency, and the several operators were making change from whatever miscellaneous funds they happened to have in their pockets until they were compelled to call on passengers to help out, or to rush to various airport concessions which were still open.

Customs procedures need a thorough overhauling and modernization for air travelers.

## American's Airfreight Pioneering

**W**ITH 36 pilots, 83 other employees, and six Douglas C-54s, the Contract Air Cargo Division of American Airlines, Inc., under the tutelage J. A. Wooten as general manager, has reported not only a business volume of more than \$350,000 in the first three months, but an operating profit.

While other scheduled airlines are adding air freight on a few select routes, Wooten claims that the initial \$350,000 turned in by his pioneering is a tenth of the monthly volume he anticipates a year from now.

Despite industry reports that CACD has abandoned contracts, it is still busy on such agreements as shuttling typists between New York, New York, flying furs from California to the east, cheese from Minnesota, entire playhouses of pianos from coast to coast, furniture and perishables.

But similar and international activity is increasing. The recent lowering of ceilings on bananas imported by air resulted in a contract for a daily flight from Mexico to the U. S. east coast. Traffic to Guatemala is rising rapidly. For almost two months Alaska shipping links with that country have been cut by ice-thrasher strikes. Its only fresh food has been airborne from the U. S. CACD has been making two flights a week—44,000 lb.—with emergency perishable shipments.

Three big Douglas fliers to Shanghai with emergency medicines for UNRRA and newspapers for our troops in the Far East. In Canada a pea crop rusted too quickly and nearby canneries were unable to handle it. Cutting international and tape and winning quick approval of Canadian labor and government authorities, CACD set up a 380-mile shuttle between Trenton, Cdn., and Windsor, where canneries were available. For nearly 74 hours freshly shelled peas were flown to Windsor 10 tons at a time taxing the procedure.

CACD is utilizing facilities of American Airlines wherever possible, and has kept its own overhead to a minimum. It makes no pickups or deliveries. No less-than-playloads are sold. All rates are on a round trip basis unless the return load is contracted. This encourages the customer at one end of a leg to make every effort to route business for the other trip, to cut his cost 50 percent.

Utilization of aircraft has risen from two and a half hours a day in August to three hours 12 minutes in September and five hours and nine minutes in October. A goal of seven hours has been set for a working week. No trip has been canceled because of inavailability. A seventh C-54 will be added shortly.

"The businessmen who want to ship by air must rely on his initiative and imagination," Wooten emphasizes, which is a clue to the reason for timidity on the part of many industries in use of air cargo. "Air freight is a new form of transportation, for new commodities to be merchandised under new methods and for new markets." It is these latter points which the old school shipper still fails to comprehend. But the railroads are showing signs that they do. To the merchandiser, Wooten and other aggressive salesmen like him in the business are attempting to prove that air freight can eliminate as many as six of the usual eight intermediate stops between producer and consumer.

"These days," Wooten says, "merchandising is moving at a terrific pace. Competition is getting keener. Businessmen are just beginning to realize the possibilities of cargo transportation." They are realizing it much faster because of aggressive sales and promoters backed up by performance like American's new division. It is something for all air carriers to watch.

ROBERT H. WOOD



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